

Work Order ID **93189**

November-15-12 9:15:25 AM

\*93189\*

Page 1

Item ID: 646.9910

Accept

\*N900040100\*

Setup

Start

\*NS1\*

Revision ID:

Stop

\*NS2\*

Item Name: Strut

Start Date: 11/15/12 Start Qty: 170.00

\*170\*

Cust Item ID:

Required Date: 12/07/12 Req'd Qty: 170.00

\*170\*

Customer:

Reference:

Approvals:

Process Plan: MLS

Date: 12-11-12 Tooling:

Date:

Run

Start

\*NR1\*

QC:

Date: SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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647.9900	N/C
----------	-----

110

**\*110\***

Doosan

Doosan Lathe

Memo

0.00

\*\*\* CUT BLANK ON CHOP SAW AT 24.125" LONG\*\*\*

x170

TURN AS PER DWG  
DWG REV: N/C  
FOLIO REV: N/A

12/12/12

DEBURR

120

**\*120\***

QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

0.00

Memo

0.00

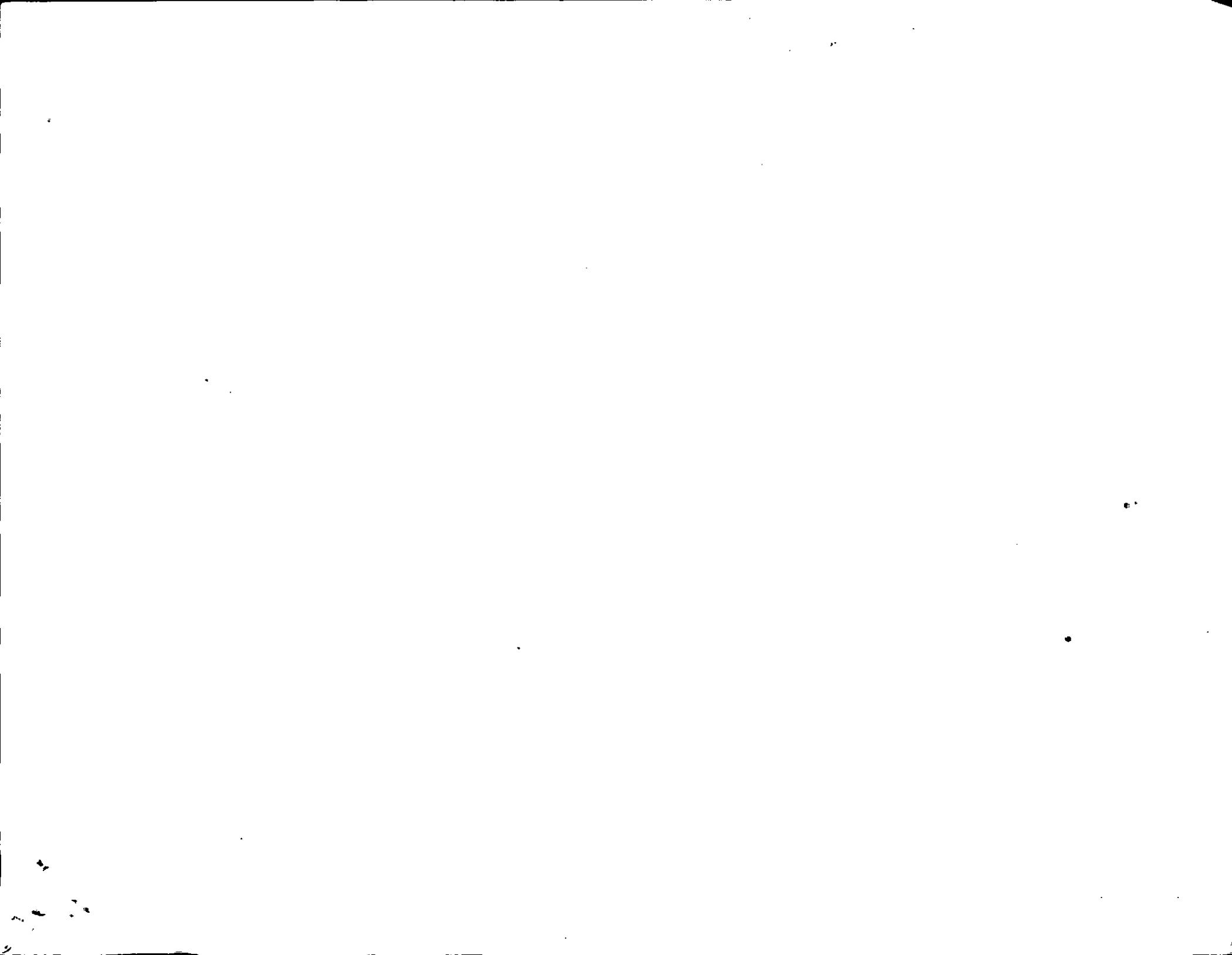
12/12/12

170 ✓

8-6  
EL  
SVO

170 ✓

8-6  
EL  
SVO



Work Order ID 93189

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November-15-12 9:15:25 AM

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\*170\*

Cust Item ID:

Required Date: 12/07/12 Req'd Qty: 170.00

\*170\*

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run

Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

170

QC8- Inspect parts - second check

0.00

B.A.

12/12/29

170

0

DAS  
08  
9-68

\*170\*

QC

Memo

0.00

Quality Control

180

PURCHASING

0.00

\*180\*

Purchasing

Memo

0.00

Purchasing

Issue P/O: 18829

ANODIZE AS PER DWG

11/13-01-15

190

Receive & Inspect for Damage & Mat'l Certs

0.00

\*190\*

Packaging

Memo

0.00

Packaging

Ensure certificate of conformity is attached

10/13/14 (170)

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS					
		Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
		Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
		Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
		Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									
FAULT CATEGORY									
Landing Gear	General								
	<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced				
	<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure				
	<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld				
	<input type="checkbox"/> Crushed/Crimped.	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled				
	<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved					
	<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong					
	<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge					
	<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset						
	<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration						
	<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence						
	<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions						

Work Order ID 93189

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Page 3

November-15-12 9:15:25 AM

Item ID: 646.9910

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Strut

Stop

\*NS2\*

Start Date: 11/15/12 Start Qty: 170.00 \*170\*

Cust Item ID:

Required Date: 12/07/12 Req'd Qty: 170.00 \*170\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

200

QC5- Inspect part completeness to step on W/O

0.00

S/H

\*200\*

QC

Quality Control

0.00

1343

170

Calx

201

\*201\*

SprayPaint

Spray Painting

Memo

0.00

170

Ø

Ø

48

13-8-13

PRIME AS PER DWG

CARDINAL 4860-50 PRIMER BATCH: 125452  
126022

203

QC14- Inspect Spray Paint

0.00

S 130814

\*203\*

QC

Quality Control

NCR: Yes / No

## **WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: Date:

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>			
Part No. _____											
NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending	Bend	Grain	Ovalized	Pressure/Forced							
Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance	Temperature/Cure							
Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect	Weld							
Crushed/Crimped.	Burrs	Instructions Incomplete/Unclear	Part Lost/Missing	Wrong Stock Pulled							
Cuffs	Contamination	Maintenance	Part Moved								
Heat Treat	Countersink	Mislabeled	Positioned Wrong								
Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge								
Ripples in Bend	Drill Holes	Offset	Other								
Torque Waves in Extrusion	Drawing	Out of Calibration									
Turning Sequence	Finish	Out of Sequence									
Wave/Twist in Tube	Folio	Outside Dimensions									

Work Order ID 93189

November-15-12 9:15:25 AM

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Page 4

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Accept

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\*NS1\*

Revision ID:

Stop

\*NS2\*

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\*170\*

Cust Item ID:

Required Date: 12/07/12 Req'd Qty: 170.00

\*170\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

210

Identify as per dwg & Stock Location.

540

0.00

\*210\*

Packaging

Memo

0.00

Packaging

\*\*\*IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV\*\*\*

170

SP

13-8-30

220

QC21- Final Inspection - Work Order Release

0.00

\*220\*

QC

Memo

0.00

Quality Control

13/9/608

MF

13-9-03

NCR: Yes / No

## **WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: Date:

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

# Picklist Print

November-15-12 9:15:24 AM

Page 1

Work Order ID: 93189

Parent Item: 646.9910

Parent Item Name: Strut

Start Date: 11/15/12

Required Date: 12/07/12

Start Qty: 170.00

Required Qty: 170.00

Comments: IPP REV:A NEW ISSUE 12-09-19 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6R0.563 6061-T6 ROUND BAR .563		Purchased	No				ft	219.3000		375.78947			DAS

Location	Loc Qty	Loc Code
MAT	2.5	
123218	2.5	
MAT012	216.8	
123294	12.8	
123483	204	

13  
9-09

12/12/12

170 ft

205 ft

124029

74



**NOTES:**

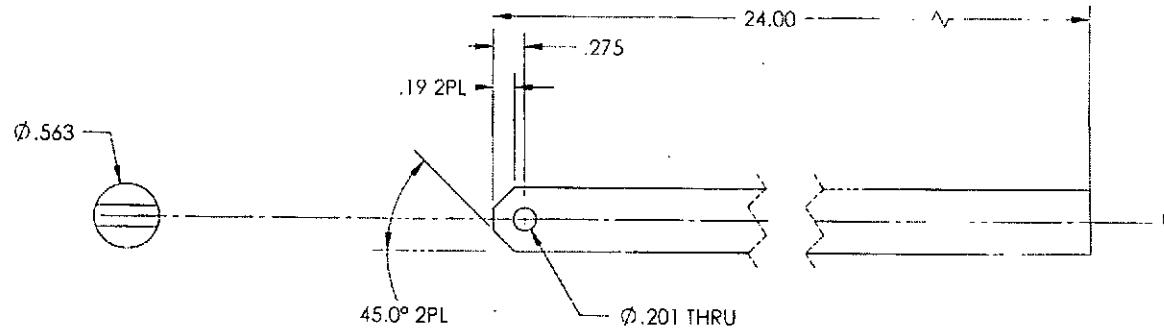
**MATERIAL: 6061-T6 ALUMINUM BAR IAW AMS-QQ-A 250/11**

**FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III CLASS 2, COLOR BLACK  
CARDINAL 4860-50 PRETREATMENT PRIMER  
PRIME IAW MIL-P-23377J TYPE I CLASS N**

**3. DEBURR AND BREAK ALL SHARP EDGES**

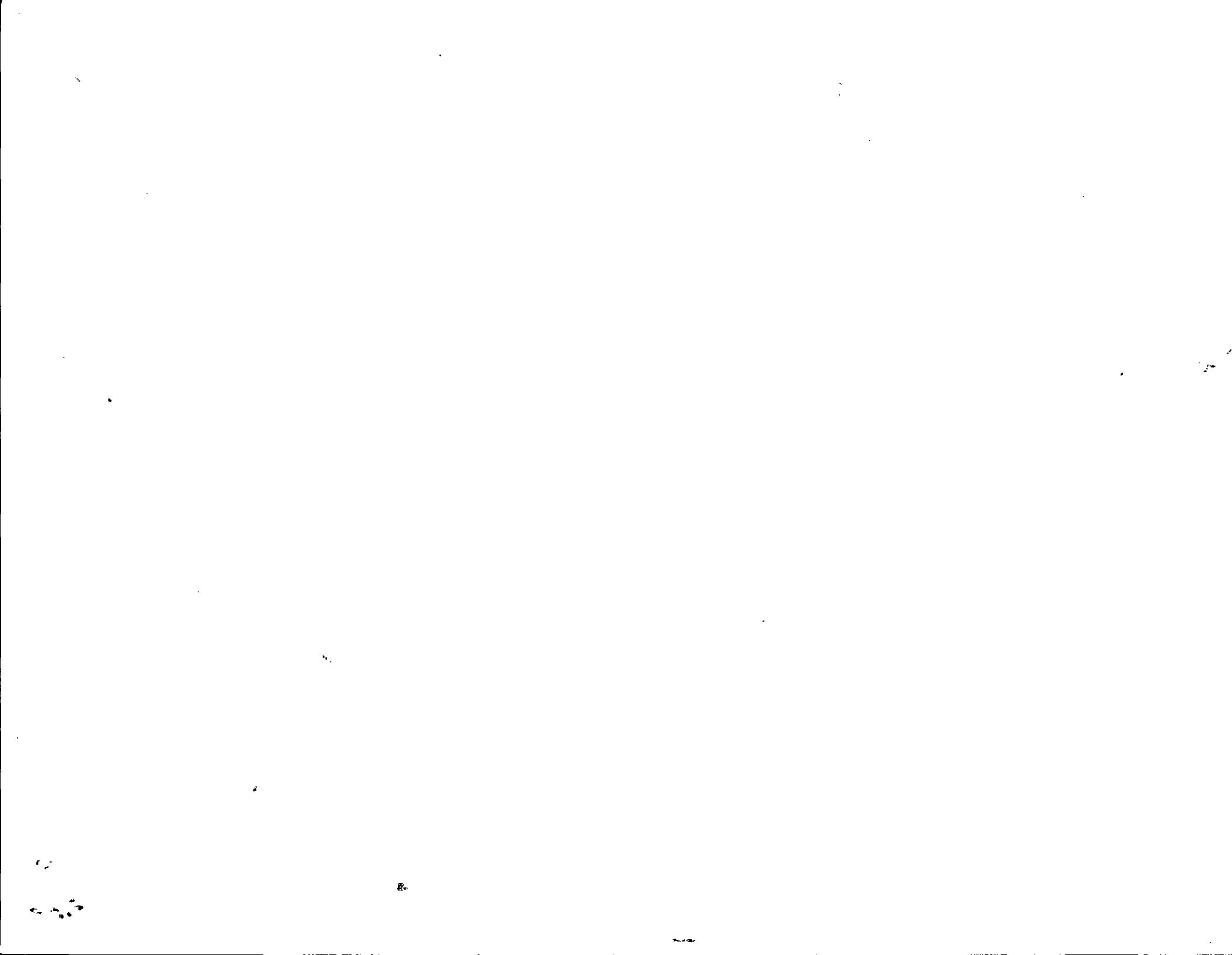
**4. IDENTIFY IAW MPP-120**

646.9910



**SU  
F  
E**  
**UNCON  
SUBJECT**

No. 93189 MCJ  
12-11-1b



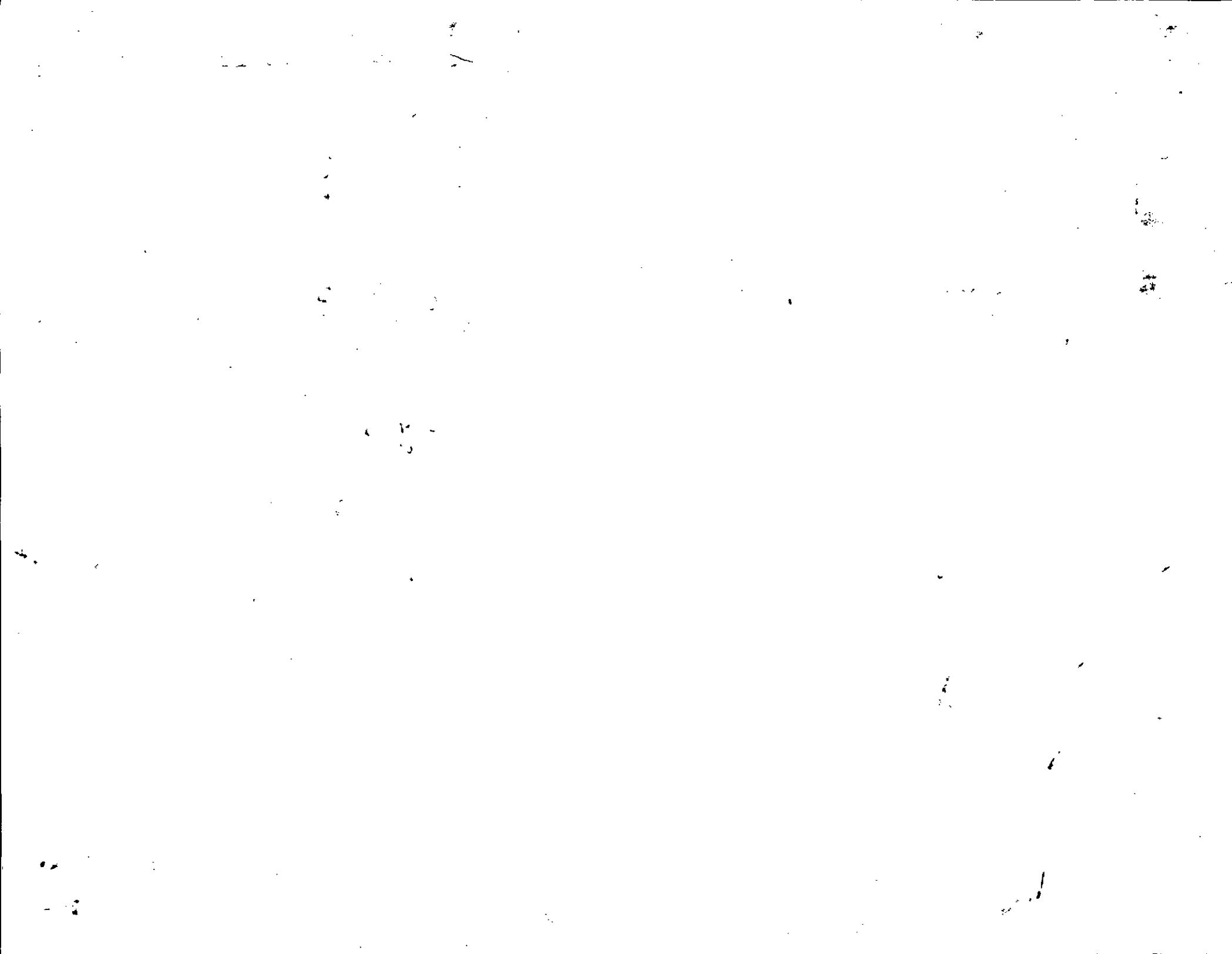
DART AEROSPACE LTD	Work Order:	93,89
Description: <del>Strut</del>	Part Number:	646.7910
Inspection Dwg: 646.7910 Rev: NC		Page 1 of 1

# FIRST ARTICLE INSPECTION CHECKLIST

Measured by:	DAG 13	Audited by:	DAG 08	Preliminary Approval:	
Date:	12/12/18	Date:	12/12/29		Date:

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15





A.T.G. Industries Inc.  
731, rue Industrielle Rd.  
PLATING DEPARTMENT  
Rockland, On K4K 1T2  
Canada  
Ph: (613) 446-4544  
Fax: (613) 446-4556

### Pack List

Number: 62212

Date: 13-Feb-13

To

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

Ship To

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via

Quantity	Description	Rev:
1 lot	Part: ASST  4 PCS 647.2010 14 PCS 647.2011 4 PCS 646.9910 4 PCS 647.1813 3 PCS 647.7915 8 PCS 649.4816 170 PCS 646.9910 30 PCS 646.3715 4 PCS 647.7914 14 PCS 646.3713 41 PCS 649.4813 4 PCS 647.1910 16 PCS 646.9710  HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 Job: 20130090	

PO: PO18829

Line:

### Certificate of Conformance

A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.

ISO 9001 : 2008 REGISTERED  
ATG SALES-2010 TERMS APPLY

DATE: 13/2/13

CERTIFIED SIGNATURE: MW

RECEIVER SIGNATURE: \_\_\_\_\_

